

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P334152

Luminaire Tested: S124DP-S795D935-4F0-1E-UDD-D

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P334152  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124DP-S795D935-4F0-1E-UDD-D  
Description: DEFINE 4 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 795 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2621.4 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: Direct

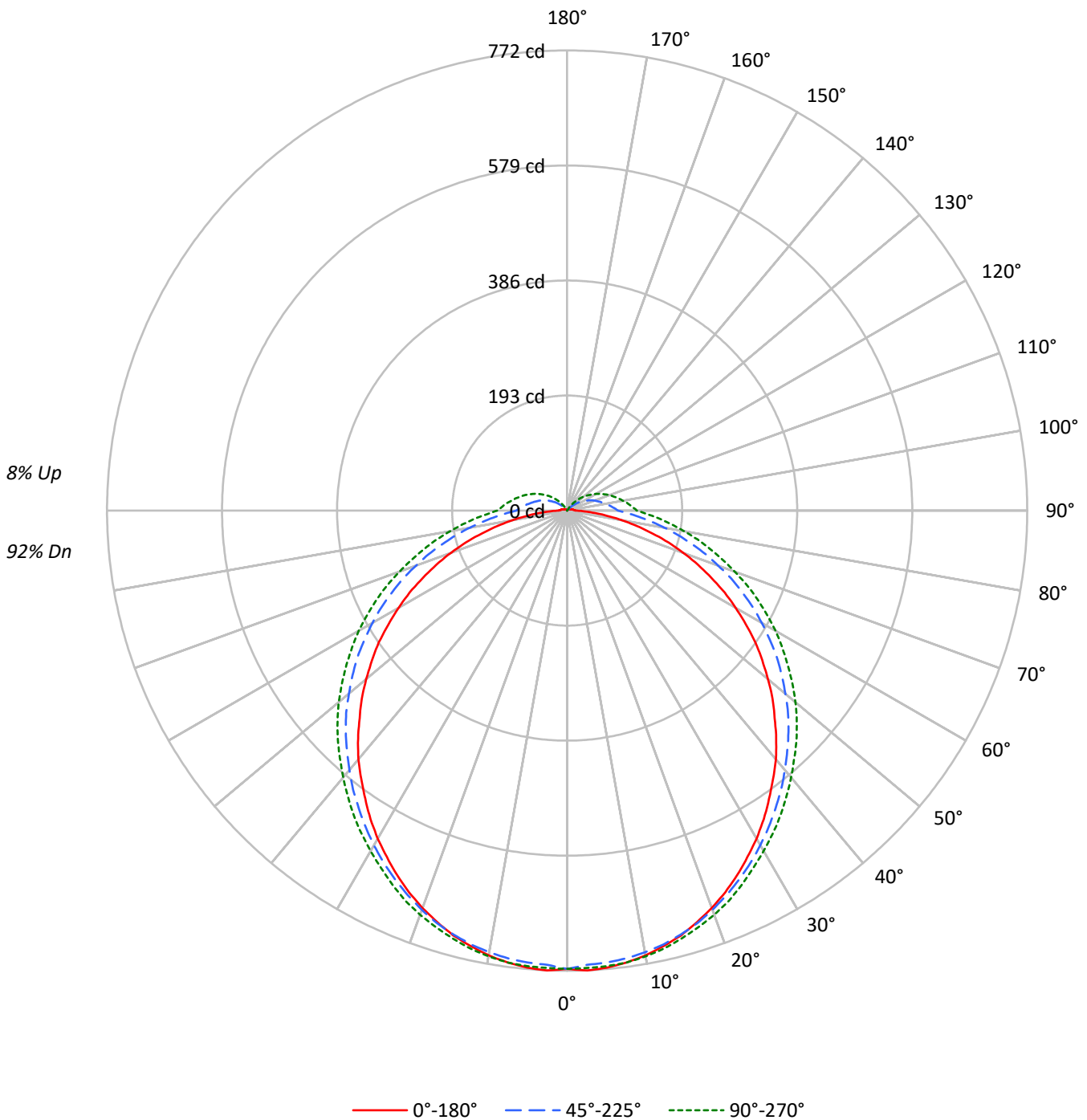
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P334152

CATALOG NUMBER: S124DP-S795D935-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92				
1	105	100	95	91	102	97	93	89	91	88	84	86	83	80	81	79	77	74				
2	95	86	79	73	92	84	77	71	79	73	68	74	70	66	70	67	63	60				
3	87	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	50				
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	49	45	43				
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37				
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	32				
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28				
8	58	44	35	29	56	43	35	29	41	33	28	39	32	28	37	31	27	25				
9	54	40	32	26	52	39	31	26	38	30	25	36	29	25	34	29	24	22				
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	20				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6207	6207	6207
5°	6226	6066	6084
10°	6189	5967	5962
15°	6133	5853	5820
20°	6049	5726	5682
25°	5955	5584	5529
30°	5853	5442	5373
35°	5737	5298	5236
40°	5645	5160	5093
45°	5508	5033	4971
50°	5392	4887	4841
55°	5272	4748	4688
60°	5085	4573	4550
65°	4880	4384	4379
70°	4633	4169	4182
75°	4286	3932	4003
80°	3900	3705	3825
85°	3412	3501	3723

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5508 cd/sqm



TEST NUMBER: P334152

CATALOG NUMBER: S124DP-S795D935-4F0-1E-UDD-D

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.8	2.8
10°-20°	208.7	8.0
20°-30°	315.6	12.0
30°-40°	381.8	14.6
40°-50°	403.7	15.4
50°-60°	379.9	14.5
60°-70°	315.2	12.0
70°-80°	221.2	8.4
80°-90°	124.7	4.8
90°-100°	74.3	2.8
100°-110°	55.0	2.1
110°-120°	36.9	1.4
120°-130°	20.8	0.8
130°-140°	9.0	0.3
140°-150°	1.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	597.2	22.8
0°-40°	979.0	37.3
0°-60°	1762.6	67.2
0°-90°	2423.7	92.5
90°-120°	166.1	6.3
90°-150°	197.7	7.5
90°-180°	198.0	7.6
0°-180°	2621.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	770	767	761	768	767	73
15°	738	739	736	744	743	208
25°	675	680	683	692	693	311
35°	591	601	610	622	624	370
45°	492	509	525	540	544	381
55°	386	404	430	447	452	344
65°	267	294	324	345	352	265
75°	148	180	216	240	248	157
85°	46	82	120	146	155	48
90°	14	48	85	110	117	9
95°	11	40	75	98	106	9
105°	8	25	57	78	85	9
115°	5	13	40	59	65	5
125°	3	3	24	40	46	3
135°	2	2	8	22	27	2
145°	1	0	0	5	9	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P334152

CATALOG NUMBER: S124DP-S795D935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	768.9	768.9	768.9	768.9	768.9
2.5°	772.3	769.7	762.8	768.9	768.0
5°	769.7	767.2	761.1	768.0	767.2
7.5°	764.6	762.8	757.7	765.4	764.6
10°	757.7	756.8	752.5	760.3	759.4
12.5°	748.2	748.2	745.6	752.5	752.5
15°	737.9	738.7	736.2	743.9	743.0
17.5°	724.1	726.7	725.8	733.6	732.7
20°	709.5	712.0	712.9	721.5	721.5
22.5°	693.1	696.5	698.3	706.9	708.6
25°	675.0	680.2	682.8	692.2	693.1
27.5°	655.2	663.0	666.4	675.0	675.9
30°	635.4	642.3	648.3	657.8	659.5
32.5°	613.9	622.5	629.4	640.6	642.3
35°	590.6	601.0	609.6	621.6	624.2
37.5°	567.4	579.5	589.8	601.8	604.4
40°	545.0	556.2	568.3	581.2	584.6
42.5°	519.2	532.1	546.7	561.4	564.0
45°	492.5	508.9	525.2	539.8	544.2
47.5°	467.5	483.9	502.8	517.5	522.6
50°	440.0	458.9	477.9	495.1	500.2
52.5°	412.4	431.4	453.7	471.0	476.1
55°	385.7	403.8	429.6	446.9	452.0
57.5°	355.6	378.0	402.9	423.6	427.9
60°	326.3	348.7	377.1	396.9	403.8
62.5°	297.9	322.9	351.3	371.1	378.0
65°	266.9	294.5	323.7	345.3	352.1
67.5°	237.6	266.9	297.9	319.4	326.3
70°	207.5	236.8	269.5	292.7	298.8
72.5°	178.2	208.4	243.7	266.0	272.9
75°	148.1	179.9	216.1	240.2	248.0
77.5°	119.7	153.3	191.1	215.2	223.9
80°	93.8	128.3	166.2	192.0	198.9
82.5°	68.0	104.2	142.1	168.8	176.5
85°	45.6	81.8	120.5	146.4	155.0
87.5°	28.4	63.7	101.6	126.6	134.3
90°	13.8	48.2	85.2	110.2	117.1
92.5°	12.9	43.0	80.1	104.2	111.1
95°	11.2	39.6	74.9	98.2	105.9
97.5°	10.3	35.3	70.6	93.0	100.7
100°	9.5	31.9	65.4	88.7	94.7
102.5°	9.5	28.4	61.1	83.5	90.4
105°	7.7	25.0	56.8	78.4	85.2
107.5°	7.7	22.4	52.5	74.0	80.1
110°	6.9	18.9	49.1	68.9	75.8



TEST NUMBER: P334152

CATALOG NUMBER: S124DP-S795D935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	6.0	16.4	44.8	63.7	70.6
115°	5.2	12.9	40.5	59.4	65.4
117.5°	5.2	10.3	36.2	54.2	61.1
120°	4.3	6.9	31.9	49.1	56.0
122.5°	4.3	4.3	27.6	44.8	50.8
125°	3.4	2.6	24.1	40.5	45.6
127.5°	3.4	2.6	19.8	35.3	41.3
130°	2.6	1.7	15.5	31.0	36.2
132.5°	2.6	1.7	12.1	26.7	31.9
135°	1.7	1.7	7.7	21.5	26.7
137.5°	1.7	0.9	4.3	17.2	21.5
140°	1.7	0.9	1.7	12.9	17.2
142.5°	0.9	0.9	0.0	9.5	12.9
145°	0.9	0.0	0.0	5.2	8.6
147.5°	0.9	0.0	0.0	0.9	4.3
150°	0.9	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)